State of Alaska
FY2003 Governor's Operating Budget

Department of Environmental Conservation
Air and Water Quality
Budget Request Unit Budget Summary

Air and Water Quality Budget Request Unit

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BRU Mission

Protect air and water quality.

BRU Services Provided

Improve air and water quality conditions where they are below public health or environmental standards.
- Issue air and water quality permits based on sound science to facilities and operations that release potentially
- harmful pollutants.
  Ensure facility compliance with permit conditions.
- Assist communities in the protection of air and water quality.
- Provide user-friendly public access to air and water quality data.
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BRU Goals and Strategies

IMPROVE AIR AND WATER QUALITY.
- Using the priorities and objectives of the Alaska Clean Water Actions plan, strive to align all governmental water quality enhancement and protection projects to achieve common goals for: fishable, drinkable, swimmable and workable waters.
- Develop, amend, and maintain water quality standards to protect and manage the best uses of Alaska's water resources.
- Continue to develop and implement internet-based databases for air and water quality information to provide broad access to information that will enhance knowledge, avoid redundancy and support decision-making capability for air and water resources.
- Prevent EPA's sanctioning of federal highway funds by assisting Anchorage and Fairbanks in conclusively showing that carbon monoxide exposures will be kept within the public health standards.

Key BRU Issues for FY2002 – 2003

The state, federal agencies, local governments and non-governmental entities all spend time and money to preserve and enhance water quality. State and local governments receive federal funds for various water quality projects. Several federal agencies also work to preserve and enhance water quality. It is essential to build and foster a unified approach to prioritize water quality projects. In conjunction with F&G, DNR, and DGC, DEC is implementing the Alaska Clean Water Actions (ACWA) plan. The plan provides a method to identify and prioritize the highest needs in the state for protecting water quality, water quantity, and aquatic habitats. It sets common principles for decision making at the state level. DEC will collaborate with federal agencies, local government and other entities to prioritize and fund water quality projects that are aligned with the AWCA policy principles.

Anchorage and Fairbanks continue to have pollution problems from carbon monoxide. Anchorage has attained the national clean air standards, but violations can still occur. Fairbanks met the standards in 2000. 2001 is a critical year for clean air if more federal sanctions are to be avoided. The department will continue to work closely with EPA and both communities to develop effective carbon monoxide control programs not only to avoid the loss of highway funds but also to protect public health.

Major BRU Accomplishments in 2001

- Adopted ACWA. The intra-agency policy principles of ACWA are designed to ensure state resources are directed to the highest priority needs to protect and enhance clean and abundant waters and healthy fish habitat; drinkable, fishable, swimmable and workable waters for Alaskans.

- Guided by a stakeholders' work group recommendations, DEC began a comprehensive redesign and rebuild of the

state's wastewater discharge permit program. The future permitting program will allocate the greatest resources towards those activities posing the greatest risks to water quality, enhancing field oversight and technical assistance and streamlining the permitting of lower risk discharges.

- Worked in conjunction with the Legislature, cruise ship industry, and public to establish enactment of the commercial passenger vessel environmental compliance program.

- Harding Lake, near Fairbanks, was removed from the state's polluted waters list.

- Worked with the City and Borough of Sitka to clean up Swan Lake. Upon confirmation with water quality measurements, Swan Lake will be removed from the state's polluted waters list.

Key Performance Measures for FY2003

Measure:
The cost per permit issued.
Sec 65 Ch 90 SLA 2001(HB 250)

Alaska's Target & Progress:
Air Quality: 7,412 for an operating permit (FY2001 median costs; 9,006 in FY2000).

We have a time billing system using codes for various activities. We track the total amount time billed to the companies for staff time on permit issuance activities.

Water Quality: We have implemented a time and expenses tracking system to determine actual permit costs.

Target values for air or wastewater permits have not been set. The air operating program is undergoing significant changes and costs are expected to decrease. Wastewater permit costs have not been historically tracked and the program is undergoing a major redesign.

Benchmark Comparisons:
External comparisons not available.

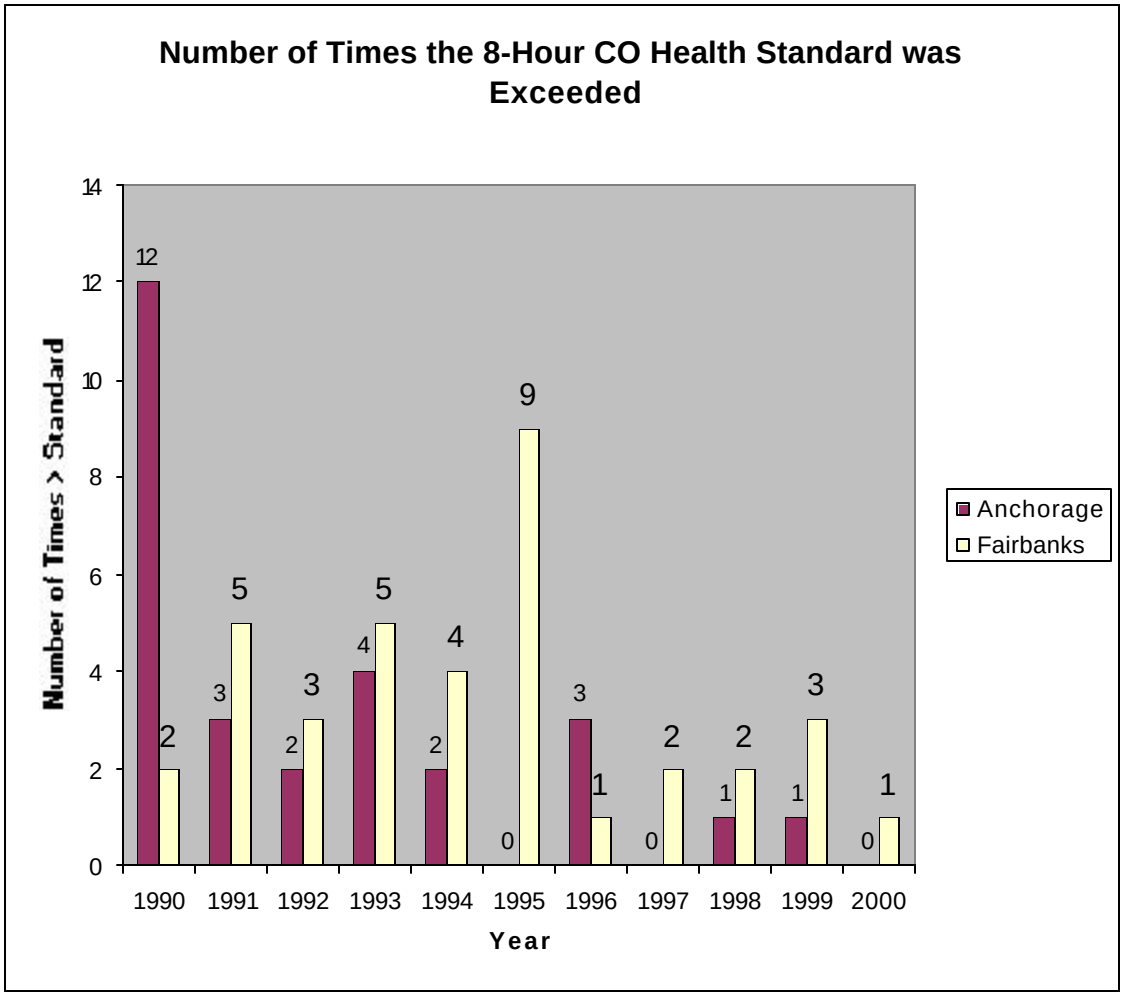
Background and Strategies:
Air Quality: The department will adopt regulations for several standard permit conditions. These standard permit conditions will avoid the need to develop corresponding conditions for each permit.

An air permit benchmarking study was completed in November 2000. In FY2002, we have allocated a small amount of grant funds for a contractor to begin developing application forms and pre-application procedures as one of the first steps in implementing the numerous recommendations of the benchmarking study.

Water Quality: Permit fees are currently based on best estimates of permit costs. The time and expense tracking system provides a mechanism to calculate average permit costs to support future revisions to permit fees. To reduce permit costs, DEC is focusing on reducing staff time per permit through the development of a facility-specific database, standardized permit conditions, a web-based application process, and the development of streamlined approvals for low-risk discharges.

Measure:
Whether the carbon monoxide levels in Fairbanks and Anchorage meet health standards.
Sec 65 Ch 90 SLA 2001(HB 250)

Alaska's Target & Progress:
For the past four winters Anchorage has met the health standard benchmark. In 2000, Fairbanks met the standard. The federal health standard provides for one event per calendar year above the 9 part per million exposure level - the second event is considered a health violation. Under federal law, a community must meet the standard for two contiguous years to qualify as attaining the standard.



Benchmark Comparisons:
Attainment of the national ambient air quality standards.

Eight communities in the nation exceed the air quality standards for carbon monoxide or have not been reclassified to healthy status. At this time only two communities actually exhibit concentrations above the standard: Los Angeles and Fairbanks.

Background and Strategies:
DEC is working closely with the Fairbanks Borough, the Municipality of Anchorage and EPA to finalize the required attainment plans. The Fairbanks plan was submitted in September 2001. The Anchorage plan will be submitted in January 2002.

Measure:
The average time taken from receipt of a permit application to approval.
Sec 65 Ch 90 SLA 2001(HB 250)

Alaska's Target & Progress:
Air Quality: The average time is 150 days for a construction permit in FY2001 (278 days in FY2000).

Water Quality: The average time is 136 days for individual permits and certification of federal permits and 62 days for general permits.

The target time period for air quality construction permits is 130 days. The target time period for water quality permits is 122 days for individual permits and certification of federal permits and 55 days for general permits.

Benchmark Comparisons:
External comparisons not available.

Air Quality: We maintain a construction permit file of pending permit applications and track the issuance of permits.

To reduce permitting time, we:

- Adopt regulations to make permits more uniform. For example, a recent permit-by-rule regulation was adopted to streamline permitting for portable oil and gas drilling.
- Implement key recommendations from the air permits benchmarking study.

Water Quality: The water permit stakeholders group made recommendations in 2000 to focus on efficiency through enhanced data management and analysis, computer-assisted permitting, and simplified permit application procedures, as well as expanded use of general approvals for low-risk activities.

To reduce permitting time, we:

- Implement key recommendations from the water permit stakeholder group.
- Redesign our permitting system to fast-track lower risk activities.
- Look for opportunities to streamline review schedules when multi-agency and federal permits are involved.

Measure:
The average time taken from receipt of a permittee complaint to resolution of the complaint.
Sec 65 Ch 90 SLA 2001(HB 250)

Alaska's Target & Progress:
The average time is 51 days, based upon 3 complaints received in FY2001.

Decrease in time from receipt of permittee complaint to resolution. Our target time period is 60 days.

Benchmark Comparisons:
External comparisons not available.

Background and Strategies:
The division tracks this measure at the program manager level and higher. The director reviews all complaints raised.

Measure:
The percentage of facilities inspected according to risk-based inspection frequency.
Sec 65 Ch 90 SLA 2001(HB 250)

Alaska's Target & Progress:
Air Quality: The risk-based inspection strategy identified 70 high-risk facilities for inspection. 57 of the 70 facilities, or 82%, were inspected in FY2001.

Water Quality: During FY2001, 48 inspections were performed based on a backlog of previously uninspected operations, or 0% according to a risk-based system. In FY2002 we developed risk-based inspection ranking criteria to prioritize inspections. Approximately 28 of the 55 (50%) inspections planned in FY2002 are based on the risk-based ranking methodology; the remainder are previously uninspected operations.

Increase the percentage of higher risk facilities. The target is 100% of high-risk facilities/operations. Field inspections provide a key opportunity to provide technical assistance to operators who avoid or mitigate what may otherwise be significant harm to the environment.

Benchmark Comparisons:
External comparisons not available.

Background and Strategies:
Air Quality: Some of the factors that make up risk based targeting are:

- Size of facility
- When the facility was last inspected
- Actual quantity of emissions
- Actual hazardous air pollutant emission
- Compliance history

Water Quality: Factors employed to target higher risk facilities include:
New facility or significant modification
- Significant permit violations
- Legitimate complaint of health or environmental hazard
- Date of last inspection
- Toxic pollutant potential
- Past compliance based on failure to submit discharge monitoring reports or exceedences in past reports
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Measure:
The number of activities covered by fast-track general permits as compared to the total number of permits.
Sec 65 Ch 90 SLA 2001(HB 250)

Alaska's Target & Progress:
Increase in number of activities covered by fast-track permits as compared with the total number of permits.

Air Quality: Of the 471 facilities required to have permits, 282 use fast track methods. Fast track methods include 93 facilities that are covered by general permits, 185 covered by fast-track permit avoidance limits (called owner requested limits or pre-approved limits), and 4 are covered by a permit-by-rule.

Water Quality: We currently issue fast-track general permits and we are also waiving project review requirements for certain low risk activities. In FY2001, 91 of the 123 wastewater discharge permits and approvals issued in FY2001 were fast-track general permits; the remainder were individual permits.

Department certifications of the Army Corps of Engineers dredge and fill permits were issued for 74 projects. Certification was waived (no project reviews performed) for 117 projects under a risk based criteria. Approval of 106 stormwater pollution prevention plans was completed under fast track general permits.

Benchmark Comparisons:
External comparisons not available.

Background and Strategies:
Air Quality: In order to increase the number of activities covered by fast-track permits, we will:
Adopt the permit-by-rule for oil drilling regulations (recently completed).
- Combine unified permitting for solid waste landfills.
- Identify general permit opportunities during permit reviews.
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Water Quality: In order to increase the number of activities covered by the fast-track permits, we will:
Develop permit-by-rule and generally allowed activities options for low-risk operations.
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Air and Water Quality

BRU Financial Summary by Component

All dollars in thousands

	FY2001 Actuals				FY2002 Authorized				FY2003 Governor			
	General Funds	Federal Funds	Other Funds	Total Funds	General Funds	Federal Funds	Other Funds	Total Funds	General Funds	Federal Funds	Other Funds	Total Funds
Formula Expenditures												
None.												
Non-Formula Expenditures												
Air and Water Director	208.6	0.0	192.8	401.4	214.3	0.0	6.4	220.7	218.6	0.0	19.6	238.2
Air Quality	1,116.6	1,863.6	2,912.1	5,892.3	1,144.6	1,623.6	2,282.0	5,050.2	1,472.3	1,639.1	2,875.6	5,987.0
Water Quality	1,735.1	1,702.3	311.8	3,749.2	2,181.0	2,182.9	322.4	4,686.3	3,612.3	1,824.8	325.4	5,762.5
Com'l Passenger Vessel Program	0.0	0.0	0.0	0.0	0.0	0.0	1,000.0	1,000.0	0.0	0.0	703.7	703.7
Totals	**3,060.3**	**3,565.9**	**3,416.7**	**10,042.9**	**3,539.9**	**3,806.5**	**3,610.8**	**10,957.2**	**5,303.2**	**3,463.9**	**3,924.3**	**12,691.4**

Air and Water Quality

Proposed Changes in Levels of Service for FY2003

The division will fully implement the new commercial passenger vessel environmental compliance program (HB260).

The division will reinstate the work that was delayed in FY2002 for the development of streamlined wastewater permitting. Delay was caused by an unexpected reduction of federal funding support. The department is requesting the loss of federal funds be replaced with general funds.

The division will increase its review and approval of stormwater pollution prevention plans to decrease surface water pollution.

Alaska is experiencing a significant increase in the level of oil and gas exploration and development. Areas west of the Kuparuk River in the National Petroleum Reserve Alaska are being aggressively explored. During the winter of 2001-2002, 45 exploration wells are planned, versus 26 last year and 8 the year before. Oil companies from outside Alaska are moving forward with plans to drill in the foothills of the Brooks Range. Exploration and development of Cook Inlet reserves is increasing as the result of significant recent discoveries. New seismic technology that has a high exploratory drilling success rate is spurring interest to conduct re-exploration of existing oil and gas production areas and may lead to additional exploratory drilling and development. The Minerals Management Service is proceeding with plans to hold lease sales in the offshore frontier areas of the Beaufort Sea, Chuckchi Sea, Norton Sound, and Cook Inlet during the next five years (2002 – 2007). Additional state and federal acreage on the North Slope and Cook Inlet will be leased for oil and gas exploration. Significant interest in the development of potential shallow natural gas and coalbed methane deposits exists and is increasing. The state has so far authorized exploration for these new resources in Northwest Alaska, the Tanana Basin, and on the Kenai Peninsula.

DEC is not keeping pace with the current level of oil and gas activities in Alaska and cannot keep up with the expected increased level of exploration and development activities.

- Oil and gas facilities are seldom inspected for compliance with state environmental laws.
- The effects of oil and gas waste discharges to the air, land and water are not being monitored or measured.
- Too many permits are issued after long delays, uncertainty, and disagreement.
- There is little communication or collaboration with industry and concerned stakeholders on the planning and design of projects to minimize environmental problems and take advantage of opportunities to promote environmentally responsible development.

The oil safety and development initiative funds new and enhanced services in the Divisions of Spill Prevention and Response, Air and Water Quality, and Statewide Public Service. Services fall in three areas 1) environmental planning, design and consultation; 2) permitting; and 3) inspection and compliance.

Environmental Planning, Design and Consultation

DEC will:

- work proactively to identify potential environmental and public health issues early in the lease sale planning process when changes can be most effective in preventing future pollution problems.
- review plans and statements for lease sale plans to identify and avoid or mitigate potential air, land and water quality effects.
- identify and resolve potential environmental and public health issues early when changes to project designs can be most effective in preventing future pollution problems.
- identify potential improvements to streamline permit approvals.
- review and prepare a single coordinated and consolidated response.
- develop and implement assessments of the cumulative effects of oil and gas activities on Alaska's environment.
- increase its participation with stakeholder workgroups to resolve disagreements on what it means to "do it right".

AIR QUALITY

- with the assistance of private contractors, develop air permit procedures, forms and regulation changes to implement the findings of the 2000 air permitting benchmarking study jointly done by the department and Alaska Oil and Gas Association to eliminate permit backlogs and provide predictability in the timing of permit issuance.
- examine policy options and technology retrofits that would reduce emissions of global warming greenhouse and avoid pollution increases from expanded oil and gas operations in the National Petroleum Reserve and Arctic National Wildlife Refuge.

WATER QUALITY
evaluate best available technologies to reduce waste quantity and toxicity.

Permitting and Plan Approvals

DEC will:

AIR QUALITY
- reduce air permit processing time by 50%, from a four-year average of 253 days to 126 days.
- eliminate the average 3-month permit queue and begin work immediately upon receipt of application.
- maintain permit quality by ensuring that permits are carefully drafted to minimize avoidable permit change requests.
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WATER QUALITY
- evaluate baseline conditions prior to issuing new wastewater permits
- reduce the time it takes to issue oil and gas related individual wastewater permits by 56 days, or roughly 30 percent.
- conduct pre-work field inspections at approximately 10% of the projects to evaluate potential alternatives, or
- methods of operation that may result in less surface fill, less run-off pollution and greater protection of sensitive areas.

Inspection, Monitoring and Compliance

DEC will:

- open a full-time North Slope field office with four staff.
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AIR QUALITY
- increase the number of oil and gas air permit inspections. Only 25% of the current 88 permitted air facilities are inspected while no exploratory operations are inspected. We expect to increase the number of these inspections to 50% and inspect 20% of the exploration drill sites.
- audit 10% of air facility reports to fully evaluate operational compliance. Reports are not currently audited against the raw data on which they are based.
- Use private contractors to complete an independent ambient air quality monitoring project to evaluate cumulative ground level air quality conditions around oil field operations.

WATER QUALITY
- conduct water inspections and provide compliance assistance to North Slope facilities.
- increase inspection rates for high priority wastewater discharges from 50% to 100%.
- increase inspections for pad and road construction projects from 0% to 50% (approximately 50 projects).
- conduct independent verification of effluent quality and verification of facility self-reporting on discharge monitoring reports.
- evaluate ambient water quality through sampling and analyses.
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Air and Water Quality

Summary of BRU Budget Changes by Component

From FY2002 Authorized to FY2003 Governor

All dollars in thousands

	General Funds	Federal Funds	Other Funds	Total Funds
FY2002 Authorized	**3,539.9**	**3,806.5**	**3,610.8**	**10,957.2**
Adjustments which will continue current level of service:				
-Air and Water Director	4.3	0.0	13.2	17.5
-Air Quality	25.0	15.5	40.2	80.7
-Water Quality	419.6	-358.1	3.0	64.5
-Com'l Passenger Vessel Program	0.0	0.0	3.7	3.7
Proposed budget decreases:				
-Water Quality	-31.6	0.0	0.0	-31.6
-Com'l Passenger Vessel Program	0.0	0.0	-300.0	-300.0
Proposed budget increases:				
-Air Quality	302.7	0.0	553.4	856.1
-Water Quality	1,043.3	0.0	0.0	1,043.3
FY2003 Governor	**5,303.2**	**3,463.9**	**3,924.3**	**12,691.4**